**Animate a flow chart**

In practice, you can either add an animated flow chart to a slide show as you're creating it, or you can instruct your students to add animation as part of the lesson later—depending on your curriculum objectives and the age of your students. Follow the steps in this article to animate a flow chart that demonstrates the function of the digestive system. Before beginning their flow charts, students can research their chosen human body system and locate, copy, and save images to be used in the presentation.

**Create a template for content that appears on all slides**

All of the parts that don't change in the animation are added to a custom layout slide in the Slide Master. The custom layout is the template on which you add all of the other parts. One advantage to using a custom layout is that when you make changes to it, all of the slides that use the layout are automatically updated.

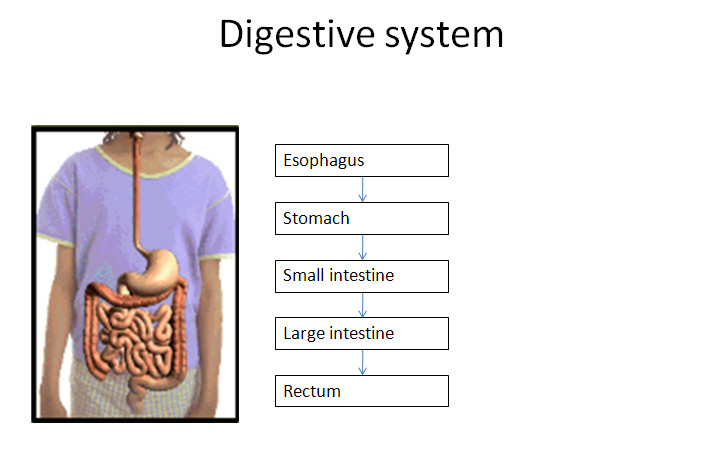
1. Open a blank presentation in Office PowerPoint 2007.
2. On the **View** tab, in the **Presentation Views** group, click **Slide Master**.
3. On the **Slide Master** tab, click **Insert Layout**. A new layout appears in the work area and is added to the slide thumbnail pane.
4. In the **Master Layout** group, clear the **Title** and **Footers** check boxes.
5. In the **Edit Master** group, click **Rename**, and then type a new name, such as **Digestive system**.
6. On the **Insert tab**, click **Text Box**, and draw a text box at the top of the slide. Then, type a title for the flow chart. In this sample, the title is **Digestive system**.
7. Click outside the title, and then, on the **Insert** tab, in the **Illustrations** group, click **Picture**.
8. Locate the picture of the digestive system, and click **Insert**.
9. Move and resize the picture to fit on the left side of the slide.

**Add the flow chart to the template**

1. On the **Insert** tab, in the **Text** group, click Text Box, and draw a small **text box** (even with the top of the picture).
2. Click **Shape Outline**, and select an outline color.
3. Press CTRL+C, and then press CTRL+V to create a copy of the text box.
4. Create a column by dragging the copy to position it below the first text box.
5. Repeat steps 3 and 4 to add as many text boxes as you need for your flow chart. In this sample, there are five text boxes.
6. Select the text boxes, click **Align**, and then click **Distribute Vertically** to space the text boxes evenly. Then, click **Align**, and click **Align Center**. You can resize or move the picture if it is covered by the text boxes.
7. In each text box, type the name of the associated step in your process, starting with the topmost text box.

**Add arrows to the flow chart**

1. On the **Insert** tab, in the **Illustrations** group, click **Shapes**, and then select the line with one arrow.
2. Move the mouse pointer over the top text box. Red connection points appear. Drag the connection point on the bottom of the text box to the connection point on the top of the next text box. When you release the mouse button, the line is added between the text boxes.
3. With the line still selected, press CTRL+C, and then press CTRL+V to create a copy.
4. Drag the new line to connect the second and third text boxes. After positioning the line, you can drag the top and bottom points of the line to snap them to connection points on the text boxes.
5. Continue copying and aligning lines until all of the text boxes are linked.
6. On **the Slide Master** tab, click **Close Master View**.

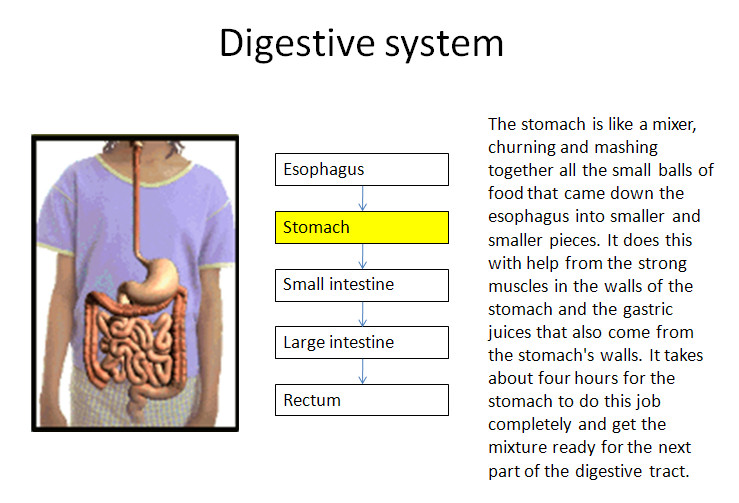


**Add slides for each step in the process**

With the new layout template created, you return to Normal view and use the new layout to add content to individual slides.

1. On the **Home** tab, in the **Slides** group, click the arrow next to **New Slide**, and then select the new layout **(Digestive system)**.
2. On the **Insert** tab, click **Text Box**, and then draw a text box over the top of the first text box.
3. In the new text box, type the same text as that of the text box it is covering (for example, **Stomach**). Then, on the **Drawing Tools Format tab, add a Shape Outline and yellow Shape Fill.**
4. **In the slide thumbnail pane, right-click the slide and then click Duplicate Slide.**
5. **In the new slide, drag the yellow text box down to position it over the next text box, and then change the text to that of the text box it is covering.**
6. **Repeat steps 4 and 5 to add slides for each step in the process.**
7. **Go back to the first slide, draw a text box to the right of the flow chart, and then type information that explains the function and process of the first step of your flow chart.**
8. **Repeat step 7 to add details to the other slides.**

**When you change from one slide to the next, the yellow highlight will appear to move to the next box in the flow chart as the detail text changes. Because you are building the slides on top of a template layout, all other parts of the slides stay perfectly aligned.**

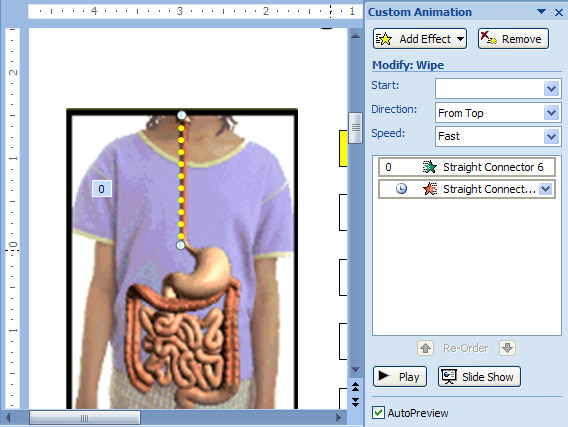
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**Add animation to the Esophagus slide**

**You can create a colored line that represents food, and then you add Office PowerPoint 2007 animation to show how the food moves through the digestive system. The following sections describe the process for adding animation to the Esophagus and Stomach slides in the example. After you finish the sections, you can create animation for the other parts of the flow chart.**

1. **Select the Esophagus slide.**
2. **On the Insert tab, in the Illustrations group, click Shapes, and then select the line.**
3. **Draw a line that extends the length of the esophagus in the diagram. (That's the tube that runs down from the top of the image.)**
4. **On the Drawing Tools Format tab, in the Shape Styles group, click the dialog box launcher. Click Line Color, and select yellow or another bright color. Click Line Style, and increase the Width to 4 pt. In Dash type, select the Round Dot. Click Close.**
5. **On the Animations tab, click Custom Animation.**
6. **Select the line, click Add Effect, point to Entrance, click More Effects, and then click Wipe. You will see a preview of the effect on the slide. Click OK. The dotted line appears to move upward. To fix that, in the Direction list, select From Top.**
7. **In the Custom Animation task pane, in the Start list, select With Previous. The Entrance effect will occur as soon as the slide appears. You can also adjust other settings for the effect.**
8. **Select the line, click Add Effect, point to Exit, click More Effects, and then click Wipe. Click OK.**
9. **In the Direction list, select From Top, and in the Start list, click After Previous.**

**At the bottom of the Custom Animation task pane, click Play. The Entrance effect draws the line from top to bottom, and the Exit effect then erases the line from top to bottom, so it appears that food is going down the esophagus into the stomach.**

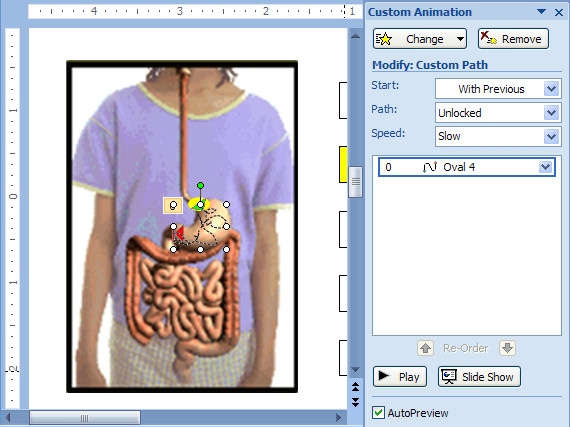
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**Add animation to the Stomach slide**

**To simulate the food being processed in the stomach, you will use a Motion Paths effect. With this type of effect, an object follows a path that you draw or select. We will first draw a small oval to represent food, and then we'll create the motion path.**

1. **Select the Stomach** slide.
2. On the **Insert** tab, in the **Illustrations** group, click **Shapes**, and then select the **Oval**.
3. Draw a small oval where the esophagus connects to the stomach. On the **Drawing Tools Format tab**, click **Shape Fill**, and select yellow. Then, click **Shape Outline**, and select **No Outline**.
4. On the **Animations** tab, click **Custom Animation**.
5. In the **Custom Animation** task pane, click Add **Effect**, point to **Motion Paths**, point to **Draw Custom Path**, and then click **Scribble**.
6. Starting on the yellow oval, draw a long squiggly line inside the stomach, ending where the food exits the stomach. The preview shows the oval following the motion path.
7. Click the **Start** list, and select **With Previous**. Then, modify other properties, as needed, on the **Custom Animation** task pane.

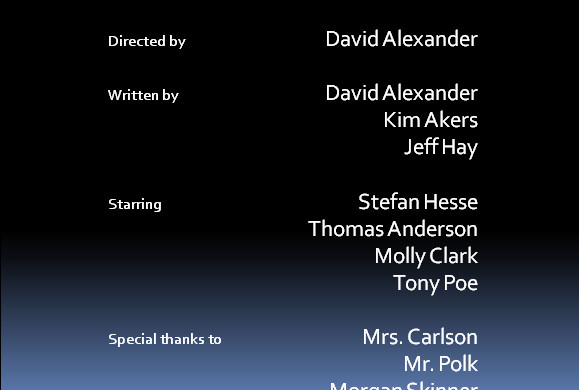
Practice adding animation to the other slides.



**Examples**

When applied to a list of text that is the same height as the slide, the Credits effect brings the text in from the lower edge of the slide and then scrolls the text up until all of the text exits the top of the slide. You can create a simple credit crawl or adjust effect options and add multiple text boxes to create elaborate scrolling lists. For example, a text box could scroll information about a famous author as a second box scrolls pictures of the author at a different speed adjacent to or behind the text.

With the Credits effect, the length of the credit roll is limited to the height of the slide. If you want to create longer rolls or change the direction of the scrolling, you can use a Motion Path effect.



*Create professional-looking credits at the end of your class presentation.*

**Type your credits in a text box**

1. Open your presentation in Office PowerPoint 2007, and add a new blank slide after the last slide.
2. On the **Insert** tab, in the **Text** group, click **Text Box**, and draw a text box at the top of the slide.
3. Type your credits in the text box.

If your credits are no longer than the height of the slide, you can use the Credits animation effect. If your text box runs below the lower edge of the slide or if you want to control the direction of the scroll, use a Motion Path effect.

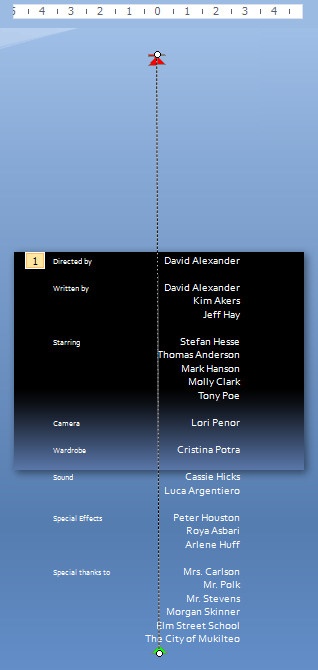
**Create a credit crawl using the Credits effect**

1. With the text box selected, on the **Animations** tab, in the **Animations** group, click **Custom Animation**.
2. In the **Custom Animation** pane, click **Add Effect**, point to **Entrance**, and then click **More Effects**. Under **Exciting**, click **Credits**.

**Tip:** To change the length of time the credits are on the screen, experiment with the Speed setting.

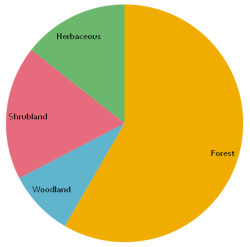
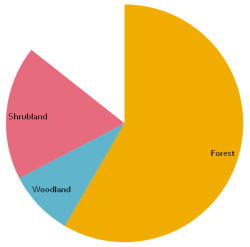
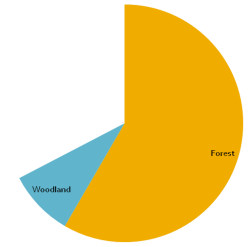
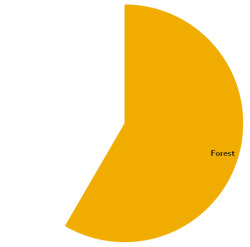
**Create a credit crawl using a Motion Path effect**

1. With the text box selected, on the **Animations** tab, in the **Animations** group, click **Custom Animation**.
2. In the **Custom Animation** pane, click **Add Effect**, point **to Motion Paths**, and click **Up**. The Motion Path control line appears over the text box.
3. With the control line selected, move the mouse over the green arrow until the cursor changes to a diagonal line. Then, drag the green arrow straight down to the bottom of the text box. Use the **Zoom** controls to show more of the workspace so that you can see below and above the slide.
4. With the control line selected, move the mouse over the red arrow until the cursor changes to a diagonal line. Then, drag the arrow the same distance straight up, until it is roughly half the length of the text box above the top of the text box.
5. Right-click the animation item in the **Custom Animation** pane, and click **Effect Options**.
6. Clear the **Smooth Start** and **Smooth End** check boxes. On the **Timing** tab, in the **Speed** field, type the number of seconds that you want the credits to run. Click **OK**.
7. Adjust the red or green arrows as needed so the credit crawl starts below the slide and scrolls off of the top completely. Adjust the Speed setting as needed to increase or decrease the speed of the crawl.

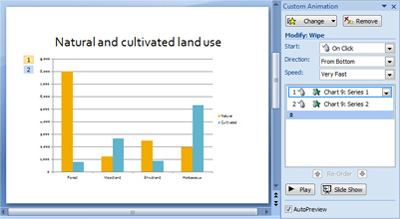
http://www.microsoft.com/education/images/spacer.gif

**Tip:** You can scroll the text box in any direction by changing the angle of the control line with the red or green arrows. For example, you can type your credit text in a wide horizontal text box and apply a horizontal Motion Path to create a ticker-type crawl.

Create your chart in Microsoft Office Excel 2007



1. Select the chart in Excel, and then copy and paste it into a PowerPoint slide. Note that by default the chart colors change to match your PowerPoint theme. Also, the chart is linked to your Excel workbook. To modify the chart, you can select the chart and then click the **Design**, **Layout**, and **Format** tabs under **Chart Tools** just as you can in Excel.
2. With the chart selected, on the **Animations** tab in the **Animations** group, click **Custom Animation**.
3. In the **Custom Animation** pane, click **Add Effect**, and select an **Entrance** effect that works well with your chart. For example, use a **Wipe** for a bar chart, and **Wedge** for a pie chart. You will see that by default the effect reveals the entire chart at once.
4. To add animation to individual chart elements, right-click the animation item in the **Custom Animation** task pane, and click **Effect Options**.
5. On the **Chart Animation** tab, select an item in the **Group chart** list to determine the order in which the elements are revealed. Click **OK**. During your presentation, you will click the mouse or press the SPACE BAR to reveal each chart element.
6. Under **Modify: effect**, you can modify the properties of the effect. For example, you can change the direction and speed of a wipe effect.
7. Click the **Play** button to preview the animation.



**Tip:** When you add Chart Animation to each element of a chart, PowerPoint creates separate animations for groups of elements. You can click the down arrows under the animation item in the Custom Animation pane to expand the list of grouped elements. To modify animation properties for a group, select an item in the expanded list. For example, you can change the animation effect for the bars in each category or delete the Background animation if you want the background to appear without animation.